AUTODOC CLUB

How to change front suspension strut on **Mercedes W169** – replacement guide

VIDEO TUTORIAL



Important!

This replacement procedure can be used for:
MERCEDES-BENZ A-Class (W169) A 200 CDI (169.308, 169.008), MERCEDES-BENZ A-Class (W169) A 170 (169.032, 169.332), MERCEDES-BENZ A-Class (W169) A 200 (169.033, 169.333), MERCEDES-BENZ A-Class (W169) A 160 CDI (169.006, 169.306), MERCEDES-BENZ A-Class (W169) A 180 CDI (169.007, 169.307), MERCEDES-BENZ A-Class (W169) A 200 CDI (169.008, 169.308), MERCEDES-BENZ A-Class (W169) A 200 TURBO (169.034, 169.334), MERCEDES-BENZ A-Class (W169) A 160 (169.031, 169.331), MERCEDES-BENZ A-Class (W169) A 180 (169.032, 169.332)

The steps may slightly vary depending on the car design.

REPLACEMENT: SUSPENSION STRUT – MERCEDES W169. TOOLS YOU NEED:



- Wire brush
- WD-40 spray
- Brake cleaner
- Copper grease
- Combination spanner #16
- Combination spanner #21
- Drive socket # E12
- Drive socket # 21
- HEX bit no.H6.
- Wheel impact socket #17
- Ratchet wrench
- Torque wrench
- Flat Screwdriver
- Crow bar
- Hydraulic strut spring compressor
- Fender cover
- Wheel chock

BUY TOOLS

Replacement: suspension strut – Mercedes W169. AUTODOC recommends:

- Both shock struts of the front suspension should be replaced simultaneously.
- The replacement procedure is identical for the left and right shock struts of the front suspension.
- Please note: all work on the car – Mercedes W169 – should be done with the engine switched off.

CARRY OUT REPLACEMENT IN THE FOLLOWING ORDER:

1 Secure the wheels with chocks.

2 Loosen the wheel mounting bolts. Use wheel impact socket #17.



3 Raise the front of the car and secure on supports.



4 Unscrew the wheel bolts.



AUTODOC recommends:

- Warning! To avoid injury, hold the wheel while unscrewing the fastening bolts. Mercedes W169

5 Remove the wheel.



6 Disconnect the ABS sensor wiring. Use a crowbar.



7 Disconnect the brake pad wear sensor plug. Use a crowbar.



Please note!

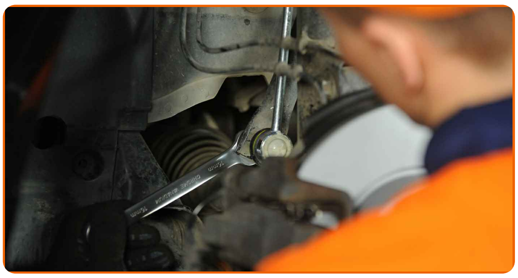
- Some cars are not equipped with the brake pad wear sensor.

8 Disconnect the brake hose mounting bracket. Use a crowbar.



9 Clean the stabiliser link fasteners. Use a wire brush. Use WD-40 spray.

10 Unscrew the fastener connecting the stabilizer link to the stabilizer bar. Use a combination spanner #16. Use HEX No.H6. Use a ratchet wrench.



11 Clean the fasteners connecting the shock strut to the steering knuckle. Use a wire brush. Use WD-40 spray.

12 Unscrew the lower fastener connecting the shock strut to the steering knuckle. Use a combination spanner #21. Use a drive socket #21. Use a ratchet wrench.



13 Remove the fastening bolts.



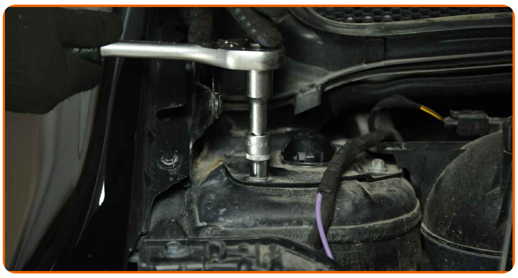
14 Disconnect the steering knuckle from the shock absorber strut.

15 Lower the car. Open the hood. Use a fender protection cover to prevent damaging paintwork and plastic parts of the car.



16 Clean the fasteners of the shock strut upper mount. Use a wire brush. Use WD-40 spray.

17 Loosen the upper fastener of the shock strut mount. Use a drive socket #E12. Use a ratchet wrench.



18 Remove the coolant reservoir.



19 Unscrew the top fastening of the shock strut mount.

Replacement: suspension strut – Mercedes W169. Tip from AUTODOC experts:

- To avoid injuries, hold the shock strut when undoing the fastening bolts.

20 Remove the suspension strut.



21 Unscrew the fastener connecting the stabilizer link to the shock strut. Use a combination spanner #16. Use HEX No.H6. Use a ratchet wrench.



22 Remove the stabilizer rod.

23 Set the shock absorber strut on the spring compressor tool.



Replacement: suspension strut – Mercedes W169. AUTODOC experts recommend:

- Note that when using a spring compressor, spring coils need to be securely gripped, compressing the spring on the opposite sides.
- Ensure the correct position of the spring in the retainer.
- Make sure that the spring coils tightly entered the lock handles.

24 Compress the spring.

25 Remove the protective cap from the shock absorber strut mount. Use flat screwdrivers (2 pieces).



26 Treat the shock strut rod. Use a wire brush. Use WD-40 spray.



27 Remove the strut piston rod nut. Use a drive socket #21. Use HEX No.H6. Use a ratchet wrench.



28 Remove the top strut mount. Use a crowbar.

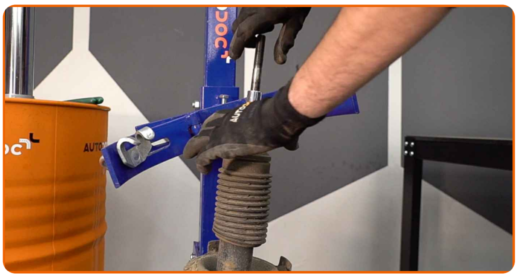


29 Release the coil spring.

30 Remove the spring.



31 Remove the shock absorber dust cap and the bump stop.



AUTODOC recommends:

- Replacement: suspension strut – Mercedes W169. Carefully inspect the mount, the boot, and the bump stop of the shock absorber. Replace if necessary.

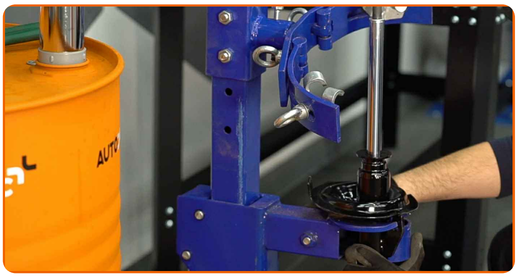
32 Remove the old shock absorber from the hydraulic coil spring compressor.



Replacement: suspension strut – Mercedes W169. Professionals recommend:

- Before installing a new shock absorber you should pump it manually 3-5 times.

33 Install the new shock absorber on the hydraulic coil spring compressor.



34 Install the dust sleeve and the bump stop on the new shock absorber.

35 Install the spring on the shock absorber. Compress the spring.



36 Install the upper strut mount and the strut mount bearing.

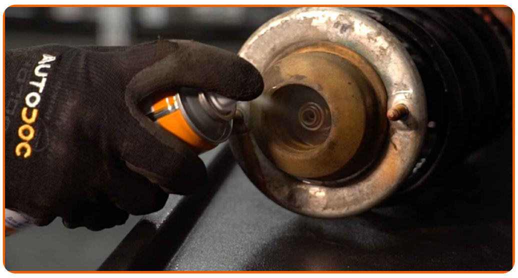
37 Tighten the shock strut piston rod nut. Use a drive socket #21. Use HEX No.H6. Use a torque wrench. Tighten it to 65 Nm torque.



Replacement: suspension strut – Mercedes W169. Tip from AUTODOC:

- Check to make sure the spring is positioned correctly. Avoid its misalignment.

38 Treat the shock strut rod. Use copper grease.



39 Install the protective cap onto the shock absorber strut mount.



40 Decompress the spring.

41 Remove the assembled shock strut.



42 Install the transverse stabilizer link.

43 Tighten the fastener connecting the stabilizer link to the shock strut. Use a combination spanner #16. Use HEX No.H6. Use a ratchet wrench.



44 Clean the mounting seats of the shock strut. Use a wire brush. Use WD-40 spray.



45 Install the shock strut into the wheel arch.

46 Tighten the shock strut top mount. Use a drive socket #E12. Use a torque wrench. Tighten it to 20 Nm torque.+45°

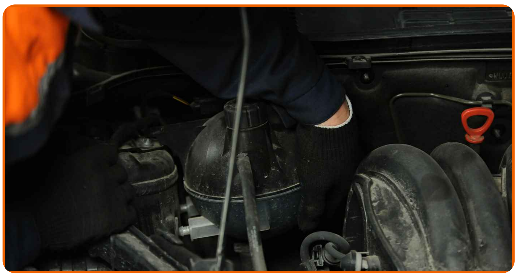


AUTODOC recommends:

- Important! Be sure to use new fasteners.

47 Treat the fasteners of the shock strut mount. Use copper grease.

48 Install the coolant reservoir.



49 Remove the fender protection cover. Close the hood.



50 Raise the front of the car and secure on supports.

51 Fix the shock absorber strut on the steering knuckle. Install the fastening bolts.



52 Screw in the fastener that connects the shock strut to the steering knuckle.



53 Tighten the lower fasteners connecting the shock strut to the steering knuckle. Use a combination spanner #21. Use a drive socket #21. Use a torque wrench. Tighten it to 120 Nm torque.+90°



AUTODOC recommends:

- Important! Be sure to use new fasteners.

54 Secure the brake hose fastening bracket.



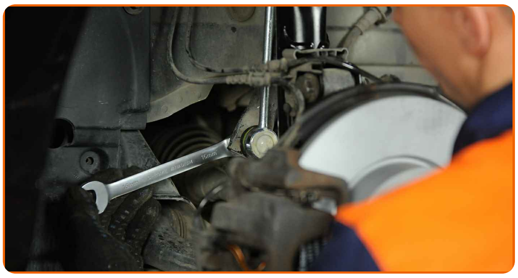
55 Connect the brake pad wear sensor plug.



56 Connect the ABS sensor wiring.



57 Tighten the fastener connecting the stabilizer link to the stabilizer bar. Use a combination spanner #16. Use HEX No.H6. Use a torque wrench. Tighten it to 60 Nm torque.



58 Treat the surface where the brake disc contacts the wheel rim. Use copper grease.



59 Clean the brake disk surface. Use a brake cleaner.



Replacement: suspension strut – Mercedes W169. Tip:

- After applying the spray, wait a few minutes.

60 Treat the shock strut fasteners. Use copper grease.



61 Install the wheel.



AUTODOC recommends:

- Important! Hold the wheel while screwing in the fastening bolts. Mercedes W169

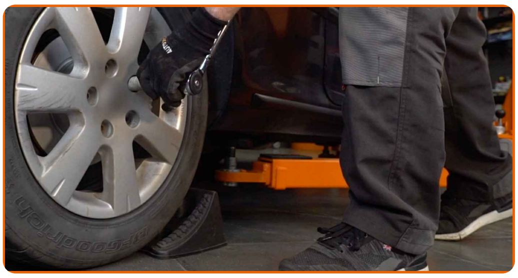
62

Screw in the wheel bolts. Use wheel impact socket #17.



63

Lower the car and working in a cross order, tighten the wheel bolts. Use wheel impact socket #17. Use a torque wrench. Tighten it to 120 Nm torque.



64

Remove the jacks and chocks.

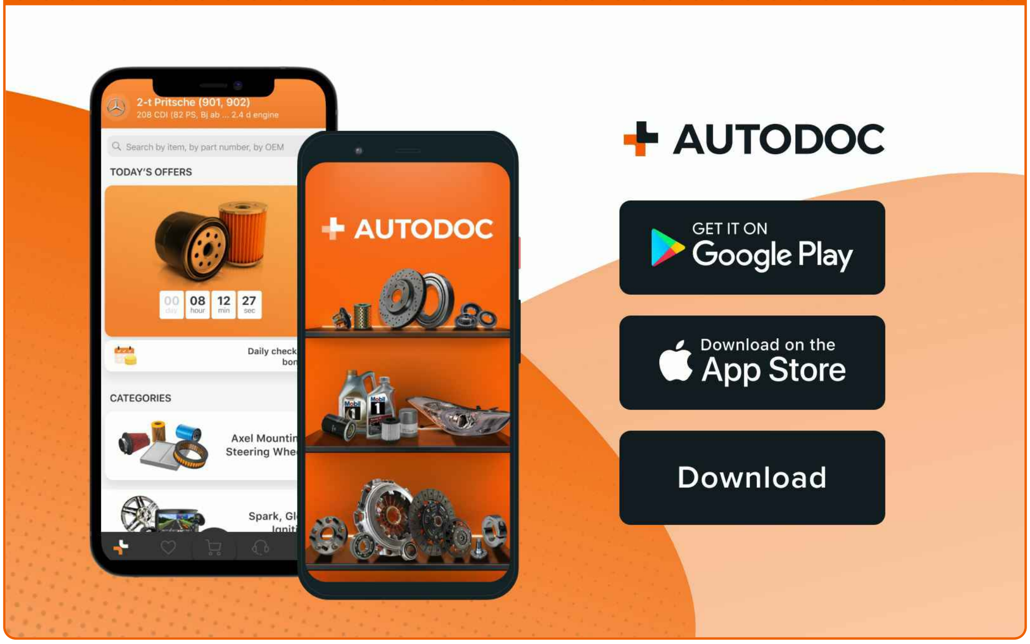


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